

## All COR ISO Recommendations

### Latent Condition, Seismic and ISS

Friday, October 12, 2012 11:28:53 AM

Type	Rec #	ABU	Unit	Year (I/R)	LC or ISS Question #	LC Question ISS Question Seismic Area	Observation	Recommendation	Resolution	Duc Date	Assigned To	Status
Seismic	635	Cracking	LPG Storage	2011		Rail Car Loading Rack, 4th column from west end	Possible severe corrosion (pic 1)	<p>KKD 4/30/2012: Received email approval from CCHMP on 4/30/2012 to extend the due date for this item to June 30, 2012.</p> <p>Remove enough caulking and concrete from column base to permit measurement of existing section thickness and structural engineering evaluation. Consider recoating all other similar column bases at rail car loading rack to mitigate further environmental corrosion.</p>	<p>The calking and concrete on this and 15 similar columns have been removed and inspection measured the thickness. Civil engineering is evaluating the remaining thickness and then Maintenance will repair as needed.</p> <p>Reassigned from Erin Jolly to Ron Moore on 10/10/11.</p> <p>Status 2/8/12 Mark Crow(MXEW) per Brian Scaief: This item has a due date of 2/15/2012 and the work will not be completed by 2/15/2012. The item was to remove the grout cap around the support columns in the LPG load rack, inspect the support columns, and perform engineering evaluation. The initial finding were reviewed and evaluated to be low risk with no immediate danger, and the loading rack could continue to operate safely in their current condition. The engineering review determined required thickness of the metal columns and made recommendations on repairs. Work has been progressing on this item over the last year, but the amount of time needed to deal with all the inspection plans, repair criteria, and drawings required for the City permit have taken longer than expected. An EWO with repair criteria has been developed and the job is currently being planned and scheduled with our Maintenance group.</p> <p>The following work have been completed.</p> <p>1.Initial inspection of the loading rack support columns to determine condition is complete</p>	6/30/2012	Moore, Ronald A.	Completed

## All COR ISO Recommendations

### Latent Condition, Seismic and ISS

Friday, October 12, 2012 11:28:53 AM

Type	Rec #	ABU	Unit	Year (I/R)	LC or ISS Question #	LC Question ISS Question Seismic Area	Observation	Recommendation	Resolution	Duc Date	Assigned To	Status
									<p>and determined to be low risk with no immediate danger.</p> <p>2.Development of an inspection plan and repair criteria for the support columns is complete.</p> <p>3.Produced detailed repair plan and drawings by Civil engineer, complete with Civil wet stamp.</p> <p>4.Obtained City of Richmond Building permit.</p> <p>5.Produced EWO 6241. All signatures complete.</p> <p>Remaining work and path forward</p> <p>1.Maintenance is currently planning/scheduling necessary to perform work and identifying a qualified contractor.</p> <p>2.Complete all required field repairs. Work is expected to start by the end of March 2012 at the latest.</p> <p>3.Expected repair completions date is June 30th.</p>			
Seismic	636	Cracking	LPG Storage	2011		Pump P-746A	Missing anchor bolt nut (pic 2)	Install nut on anchor bolt	Bolt on pump pedestal installed.	2/23/2011	Moore, Ronald A.	Completed
Seismic	637	Cracking	LPG Storage	2011		Truck Loading Racks N. Light Stanchion Island 1	Possible inadequate anchor bolt thread engagement (pic 3)	Perform structural engineering evaluation to determine if amount of thread engagement is adequate	The nuts were tightened by Maintenance.	2/15/2012	Jolly, Erin E.	Completed